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|---|-------------|----------------------|---|------------------|
| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
| 10/684,168  | 10/10/2003  | Shimson Gottesfeld   | 21535-007 CON   | 2312             |
| <div>7590 02/20/2007<br/>MINTZ, LEVIN, COHN, FERRIS<br/>GLOVSKY AND POPEO, P.C.<br/>The Chrysler Center<br/>666 Third Avenue<br/>New York, NY 10017</div> |             |                      | <div>EXAMINER<br/>DOVE, TRACY MAE</div> <div>ART UNIT 1745<br/>PAPER NUMBER</div> |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE  |             | MAIL DATE            | DELIVERY MODE   |                  |
| 3 MONTHS  |             | 02/20/2007           | PAPER   |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/684,168 | <b>Applicant(s)</b><br>GOTTESFELD, SHIMSON |  |
|                              | <b>Examiner</b><br>Tracy Dove        | <b>Art Unit</b><br>1745                    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 7-9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3 IDSs</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statements (IDSs) submitted on 7/25/05 and 1/30/06 have been considered by the examiner.

The information disclosure statement filed 10/10/03 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. Document DE 197 22 598 has not been considered.

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-3 and 9, drawn to a fuel chamber for a fuel cell system, classified in class 429, subclass 34.
- II. Claims 4-6 and 10, drawn to a method for delivering fuel, classified in class 429, subclass 17.
- III. Claims 7, 8 and 11, drawn to a method for delivering liquid, classified in class 429, subclass 17.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product

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as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product may be used in a materially different process.

Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product may be used in a materially different process.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different designs. Group I does not require the gas product produced by the anode chamber to pressurize a first chamber, wherein the first chamber does not contain the liquid.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

During a telephone conversation with Brian Hopkins on 2/13/07 a provisional election was made with traverse to prosecute the invention of Group II, claims 4-6 and 10. Affirmation

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of this election must be made by applicant in replying to this Office action. Claims 1-3, 7-9 and 11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites “delivering fuel from a fuel chamber to a fuel cell” and then recites “driving fuel contained in the fuel chamber to the destination area”, which appears to improperly broaden the claim. The claim states the fuel is delivered from the fuel chamber to the fuel cell. Thus, the destination area must be within the fuel cell. The claim should be amended accordingly. See also claim 6. In claim 6 it is unclear how the fuel is delivered to a mixing chamber if claim 1 requires the fuel from the fuel chamber to be delivered to the fuel cell.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 4, 5 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yonetsu et al., US 6,506,513.

Yonetsu teaches a fuel cell system comprising a fuel cell body including a unit cell having an electromotive section and a liquid fuel tank for storing a liquid fuel that is to be supplied to the fuel cell body. The liquid fuel tank is provided with a pressure adjusting mechanism for introducing a required amount of the liquid fuel from a liquid outlet port of the tank into the unit fuel cell (abstract). The mechanism prevents a negative pressure by positively introducing a gas component generated in the fuel cell into the liquid fuel tank (6:17-40). A tube capable of introducing the gas generated on the side of the fuel cell body was arranged within the liquid fuel tank. One end of the tube was open within the liquid fuel tank and the other end is open to provide a space for collecting the carbon dioxide gas generated on the side of the anode of the fuel cell body. A pressure control valve was mounted to the tube so as to make it possible to release the pressure through the valve over a predetermined level of pressure (16:25-35).

Thus the claims are anticipated.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yonetsu et al., US 6,506,513.

Yonetsu teaches a fuel cell system comprising a fuel cell body including a unit cell having an electromotive section and a liquid fuel tank for storing a liquid fuel that is to be supplied to the fuel cell body. The liquid fuel tank is provided with a pressure adjusting mechanism for introducing a required amount of the liquid fuel from a liquid outlet port of the tank into the unit fuel cell (abstract). The mechanism prevents a negative pressure by positively introducing a gas component generated in the fuel cell into the liquid fuel tank (6:17-40). A tube capable of introducing the gas generated on the side of the fuel cell body was arranged within the liquid fuel tank. One end of the tube was open within the liquid fuel tank and the other end is open to provide a space for collecting the carbon dioxide gas generated on the side of the anode of the fuel cell body. A pressure control valve was mounted to the tube so as to make it possible to release the pressure through the valve over a predetermined level of pressure (16:25-35).

Yonetsu does not explicitly state the fuel is supplied to a mixing chamber. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have known the pressure adjusting mechanism could have been used to deliver fuel from the fuel tank to any other chamber having a lower pressure than that of the fuel tank. Supplying the fuel to a mixing chamber is obvious in view of the teaching by Yonetsu that the pressure adjusting mechanism can be used to supply fuel from the fuel tank to the anode of a fuel cell.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 14, 2007



TRACY DOVE  
PRIMARY EXAMINER